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Project

Donor-driven contractor-built housing

Project name

Reconstruction and rehabilitation in tsunami affected villages

Country	SRI LANKA
Region/town	Trincomalee District / Kuchchaveli Division: villages of Kalarawa, Pudavaikadu and Salapayaru
GIS data (WGS 84)	?
Project type	New construction
Typology	Individual housing
Approach	contracted construction
Beneficiaries	Tsunami victims
Climate	Hot, humid
Special constraint	flood / tsunami / cyclone
start / end of project	2005 / 2008
Country GNP	4,300 USD/cap



Partners

Organisation (donor)	Swiss Solidarity; Swiss Red Cross; Austrian Red Cross
IO/NGO partners	People in Need; Agrisud; World Concern; Women's Bank
GO partners	Ministry of Housing and Common Amenities (NHDA) and District Secretariat

Context to project

Initial Situation	The Tsunami occurring on 26th December, 2004 has been catastrophic for Sri Lanka. It killed more than 31,000 people and injured some 23,000. More than 100,000 homes were destroyed or damaged, 500,000 people were displaced. About 70% of the coastline was directly affected – with damage ranging from a strip of some 50 metres inland in parts of the Jaffna region, to up to 1 km in some other areas, such as Ampara district. Six of the eleven divisions of Trincomalee district were severely hit by the Tsunami. Approximately 980 persons were killed in the district, and an estimated 30,000 families (approx. 150,000 persons) were affected and more than 7,800 houses damaged.
Goals, Beneficiaries	The programme aims at sustainably restoring and improving the overall living conditions and capacities of the tsunami-affected communities in Kuchchaveli division, Trincomalee district, Sri Lanka. This was done through the provision of new houses, infrastructure buildings and long-term livelihood projects aimed at community-building, income generation and the improvement of sanitation and health conditions in the affected area.
Implementations / Results	All beneficiaries - selected by the District Secretariat - who would receive a house from A&SRC, were given the information of the actual plot their house would be built on and at the same time they chose their favourite house design out of the 7 model houses initially constructed on the 3 project sites. On basis of this data tender documents were prepared and contractors appointed after open tendering procedures. 384 houses have been completed, including infrastructure buildings, roads, electrical supply and water and sanitation provision. In co-operation with NGO's long-term livelihood programmes have been implemented such as CBO-strengthening; business training; livestock rearing training; legal training; pre-school teacher training; first-aid, health and hygiene training and home-gardening.

Reference data (comparative)

Land plot (per house unit)	500 m ²	Garden	425 m ²
Ground floor (incl. walls)	75 m ²	Floor (incl. walls)	1 floor
Occupants max.	8 persons	Occupants min.	2 persons
Total house area	75 m ²	Surface / occupant	15 m ² /cap
House volume (outside dimension)	265 m ³	Volume / occupant	52 m ³ /cap
Number of rooms	3 rooms	Occupant / room	2 cap/room
Heated area	0 m ²	Heated area/occupant	0 m ² /cap
cost /unit	11,000 USD	cost/occupant	2,200 USD/cap
cost/m ²	146 USD/m ²	cost/m ³	42 USD/m ³
Total housing cost	11,000 USD	Self help (beneficiaries)	2,200 USD/cap
community development projects cost	1,000 USD	Comm. Dev. cost/occupant	200 USD/cap

Approach to results

Initial Situation

About 7,800 houses were destroyed by the tsunami in the region of Trincomalee. A majority of the people living in the area of Kuchchaveli rely on fishery for their livelihood. Before the tsunami most of them lived in basic mud huts with palm-leave roofing or in simple cadjun huts solely made of palm leaves. Some houses made of brick, were also fully damaged by the waves. The villages were heavily affected during the civil war; while a majority of the Tamil-families fled to surrounding LTTE-controlled areas or to India, Sinhala families fled to the South of Sri Lanka; they only returned to their land after the ceasefire agreement in 2002. Due to the tsunami, these families are again homeless and live in temporary shelter or private accommodation, e.g. with relatives, in the area. In Kuchchaveli division a total of 151 persons died, 1'005 houses were fully destroyed and 153 houses partially damaged.

Approach

The integrated programming approach applied by the A&SRC follows the following strategy:

- The resettlement of families, including the construction of permanent houses and water and sanitation facilities, is implemented with a community-mobilisation approach, thereby transferring the decision making process to the communities and involving the beneficiaries as much as possible in the planning and implementation phase of the project and handing over ownership of the project from the beginning.
- The rehabilitation of a school building serves as the basis for improving educational infrastructure and will contribute in providing education for young people under adequate learning conditions.
- The participatory approach will be considered as an entry point to involve in community-based activities, such as First Aid, Disaster Preparedness, Preventive Health and Livelihood provided in co-operation with SLRCS and INGOs active in the region.

Problems/Constraints

Delays in an operation of this scale are inevitable. Most delays relate to external factors which range from (i) the escalation of the conflict in the north and east of Sri Lanka over (ii) recurring countrywide shortages of building materials to (iii) administrative delays caused by internal and external factors. However, many of the recovery projects were always intended to have long time frames as they have been integrated into the risk reduction programmes of the Sri Lanka Red Cross, which are focused on working with communities to reduce their future vulnerability to disasters.

Lessons learned

Now that all buildings have been handed over to their new owners, the results of the rehabilitation and relocation programme clearly indicate that the overall goal of the programme stands attained with added value. This manifests itself in the experience and learning generated by the programme both for the communities and A&SRC and will help to enhance future reconstruction efforts.

Evaluation

This programme was geared towards long-term development of livelihoods and to enhance the self-help capacities and living conditions in the communities supported by A&SRC. It included hard- and software project components: (i) Improvement of the livelihood situation of the targeted communities; and (ii) assure the sustainability of the new settlements constructed within the A&SRC housing projects.

- For the construction component the A&SRC took the decision to attract small local contractors to build the houses and infrastructure buildings. This solution improved considerably the speed of implementation, the quality of the resulting buildings and the cost per unit. Furthermore, these contractors also hired their labourers from amongst the beneficiary communities, thus increasing the feeling of involvement with the villagers.

- One of the most important aspects of the co-operation with INGOs was the financing and coordination of long-term livelihood activities with different partners in the 3 villages, e.g. WorldConcern, People in Need, Agrisud and Women's Bank are continuing to work with the different communities. This collaboration had the considerable advantage of increasing the speed of implementation by avoiding cumbersome administrative hurdles in Colombo.

Legal framework

Politically attached to

Trincomalee District / Kuchchaveli Division: villages of Kalarawa, Pudavaikadu and Salapayaru

Type of ownership

All plots and houses (384) were handed-over to the beneficiaries, while the infrastructure buildings were handed-over to the Local Authorities.

Construction information

Construction

Structure

Foundations made of natural stone rubble masonry
Walls or columns load-bearing 20 cm concrete block walls, no columns or ring-beams

Facade cement plastering, painted

Roof timber trusses with clay tiles

materials

Earthquake protection incorporated in design of buildings

Floor surface cement screed with floor paint

Walls hollow concrete blocks locally produced

Doors wooden frames and doors

Windows wooden frames with glass windows

Ceiling N/A

Thermal insulation N/A

wat/san

Roofing treated timber trusses with clay tiles

Water common drinking water supply provided;

wash water from communal wells provided

Toilets provided and connected to septic tanks and dispersion beds

Waste water provided and connected to soak-away pits

Rain water storm-water drains provided along roads

equipment

Heating system N/A

Electricity connection individual connections to each house provided

Telephone connection not available / mobile network operational

Cooking facilities kitchen with chimney provided (no equipment except kitchen sink)

Total

\$11,000 100%

Urban planning

Distance to

Health centre 30 km

Education facilities 2 km

Income activities 1 km

Public transport 0.5 km

For further information

Involved SHA construction group consultants	local consultants (not recommended)
Other involved SHA consultants	N/A
Author / Contact:	Swiss Red Cross, Bern
Recommended Institutions:	UNOPS
Recommended partners:	INGO's
Recommended books/reports:	EoM reports of construction delegates
Relevant other projects (links):	CfRR projects in Sri Lanka
Annex	plan of house and pictures

